Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

HW#41H: Congruent Triangles   
AAS, SSA, AAA, & HL - Honors Geometry

Due Date: Wednesday, Dec. 10th, 2014

**Failure to show all work and write in complete sentences will result in LaSalle!**

**Directions:** Is it possible to prove that the triangles are congruent? If so, state the postulate or theorem you would use.

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| 1. State the third congruence that is needed to prove that Δ*ABC* ≅ Δ*XYZ and the postulate/theorem needed to prove congruency of the triangles.*      1. **Given:** ∠*C* ≅ ∠*Z, AC*  ≅ XZ \_\_?\_\_ ≅ \_\_?\_ 2. **Given:** ∠*B* ≅ ∠*Y*, *AB*  ≅ XY, \_\_?\_\_ ≅ \_\_?\_\_ 3. **Given**: BC ≅ YZ , ∠*B* ≅ ∠*Y* \_\_?\_\_ ≅ \_\_?\_\_ | | |
| 5. Prove the following:  **GIVEN**: WU YV, XU ZV, WX ≅ YZ  **PROVE**: Δ*WXU* ≅ Δ*YZV* | | |
| 6) Prove the following:  **GIVEN**: ∠*B* ≅ ∠*D*, ∠*DAE* ≅ ∠*BEA*  **PROVE**: Δ*ABE* ≅ Δ*EDC* | | |
| 7) Prove the following:  *QS*  *PR*    **Given:**  PS RS QR RS, *SP*≅ RQ  **Prove:** Δ*PRS* ≅ Δ*QSR* | | |
| 8)Prove the following:  **Given:** *|| ,* ∠*ADB* ≅ ∠ *CBD*  *DC*  *AB*  **Prove:** Δ*ABD* ≅Δ*CDB* | | |